

REMARKS/ARGUMENTS

Applicants wish to thank the Examiner for the review of the present application. Claims 94, 102, 103, 169, 184, 192, 193 and 199 have been amended, and new claims 200-250 have been added. No new matter has been added.

Applicants note that claims 95 and 97-101 have been found to be allowable if rewritten in independent format. New claims 200-205 reflect, with minor amendments, claims 96 and 97-101, respectively, and incorporate independent claim 95.

Double Patenting

Claims 94-108 and 169-199 have been rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-33 of copending application no. 09/953,373. Applicants submit herewith a Terminal Disclaimer to remove this rejection.

35 U.S.C. 103

Claims 94-108 and 169-199 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent no. 5,320,102 (Paul et al., hereinafter Paul). Amended claim 94 includes, in part, obtaining electronic image data of a joint. The image data is electronically evaluated in three dimensions to obtain information about geometry of the joint, including evaluating the joint along at least two non-parallel planes.

Nowhere does Paul teach or suggest electronically evaluating image data of a joint, including evaluating the joint along at least *two non-parallel* planes, as required by amended claim 94. Instead, Paul discloses obtaining MRI slices (planes) of cartilage and evaluating each individual slice *in 2 dimensions* to obtain cartilage thickness and intensity variations both along and across the cartilage. (see Paul at Fig. 3, and col. 4, line 64 to col. 6, line 33).

Since Paul fails to teach or suggest electronically evaluating image data, including evaluating the joint along at least *two non-parallel* planes, as required by amended claim 94, amended claim 94 is allowable over Paul. Dependent claims 95-108 are allowable for the same reason as claim 94, and are further allowable in view of the additional limitations set forth therein.

Amended claim 169 is directed at a method of treating a human joint disease that includes, in part, obtaining electronic image data of a joint. The image data is evaluated in three dimensions to obtain geometrical information about the joint. A shape is determined for at least one of a transplant, a graft, an implant, a replacement material, a scaffold, a regenerating material and a repair system based on said three dimensional evaluation.

Paul discloses that an MR image can provide structural information to help decide whether a patient requires surgical repair or other remedial action (see Paul at col. 1, lines 44-47). However, Paul fails to teach or suggest determining a shape for at least one of a transplant, a graft, an implant, a replacement material, a scaffold, a regenerating material and a repair system based on said three dimensional evaluation, as required by amended claim 169. Accordingly, amended claim 169 as amended, is allowable over Paul. Dependent claims 169-183 are allowable for the same reason as claim 169, and are further allowable in view of the additional limitations set forth therein.

Amended claim 184 requires that said electronically evaluating includes evaluating said joint along at least two non-parallel planes. Accordingly, claim 184, and dependent claims 185-198 are allowable over Paul for the same reason as claim 94, and are further allowable in view of the additional limitations set forth therein.

Amended claim 199 requires that said electronically evaluating includes evaluating said image data along at least two non-parallel planes. Accordingly, claim 184, and dependent claims 185-198 are allowable over Paul for the same reason as claim 94, and are further allowable in view of the additional limitations set forth therein.

Claims 96, 171 and 186 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul in view of Robinson, previously made of record. Claims 103-105, 108, 178-180, 183, 193-195, and 198 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul in view of Hunziker, also previously of record.

As stated above, Paul fails to teach or suggest: electronically evaluating the data, including evaluating the joint along at least two non-parallel planes, as required by claims 96 and 186; and determining a shape for at least one of a transplant, a graft, an implant, a replacement material, a scaffold, a regenerating material and a repair system based on said three dimensional evaluation, as required by claim 171. Robinson also fails to teach or suggest such a limitation. Since none of these references teach this required limitation of claims 96, 171 and 186, the embodiment of claims 96, 171 and 186 are deemed nonobvious over any combination of these references.

Hunziker, like Robinson, fails to supply the deficiencies of Paul. Therefore, the Hunziker/Paul combination does not suffice to render claims 103-105, 108, 178-180, 183, 193-195, and 198 unpatentable, and accordingly Applicants respectfully request that the Examiner reconsider and withdraw this rejection as well.

It is believed that the application is now in order for allowance and Applicants respectfully request that a notice of allowance be issued. It is believed that a three month

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extension of time is required for this matter. Applicant hereby petitions for same and requests that any extension or other fee required for timely consideration of this application be charged to Deposit Account No. 19-4972.

If the Examiner has any questions as to the allowability of the currently pending claims or if there are any defects which need to be corrected, the Examiner is invited to speak to the Applicant 's counsel at the telephone number given below.

Respectfully submitted,



Alexander J. Smolenski, Jr.
Registration No. 47,953
Attorney for Applicant

Bromberg & Sunstein LLP
125 Summer Street
Boston, MA 02110-1618
(617) 443-9292

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